

Please amend the application as follows:

Amendments to the Claims:

Claims 1-5 were previously canceled. Please amend Claims 6, 8, 9 and 11-15. This claim listing will replace all prior versions and listings of claims in the application:

Claim Listing:

Claims 1-5 (Canceled)

Claim 6 (Currently Amended): A method for producing soluble and active recombinant protein comprising:

- a) expressing an insoluble protein as a fusion protein with an alpha-crystallin type protein or a fragment thereof ~~comprising an active domain~~ in bacteria;
- b) purifying said fusion protein; and
- c) removing said alpha-crystallin type protein or fragment thereof from said purified fusion protein,
thereby resulting in said soluble and active recombinant protein.

Claim 7 (Previously Presented): The method of Claim 6, wherein said alpha-crystallin type protein is selected from the group consisting of p26, SicA, and alpha-A-crystallin.

Claim 8 (Currently Amended): The method of Claim 6, wherein said fusion protein comprises said alpha-crystallin type protein or a fragment thereof ~~comprising an active domain~~, said insoluble protein, and a proteolytic cleavage site, and wherein said cleavage site is positioned between said alpha-crystallin type protein or a fragment thereof ~~comprising an active domain~~ and said insoluble protein.

Claim 9 (Currently Amended): A method of increasing the solubility of a first protein, said method comprising expressing said first protein as fusion protein with a second protein consisting essentially of an alpha-crystallin type protein or a fragment thereof ~~comprising an active domain~~.

Claim 10 (Previously Presented): The method of Claim 9, wherein said alpha-crystallin type protein is selected from the group consisting of p26, SicA, and alpha-A-crystallin.

Claim 11 (Currently Amended): The method of Claim 9, wherein said fusion protein comprises said alpha-crystallin type protein or a fragment thereof ~~comprising an active domain~~, said first protein, and a proteolytic cleavage site, and wherein said cleavage site is positioned between said alpha-crystallin type protein or a fragment thereof ~~comprising an active domain~~ and said first protein.

Claim 12 (Currently Amended): A method of increasing the stability of a first protein, said method comprising:

- expressing said first protein as a fusion protein with a second protein consisting essentially of an alpha-[[A-]] crystallin type protein in bacteria;
- purifying said fusion protein; and
- removing said alpha-crystallin type protein or fragment thereof from said purified fusion protein,

thereby resulting in said first protein.

Claim 13 (Currently Amended): The method of Claim 12, wherein said alpha-crystallin type protein is alpha-A-crystallin, and said fusion protein comprises said alpha-A-crystallin protein, said first protein, and a proteolytic cleavage site, and wherein said cleavage site is positioned between said alpha-A-crystallin protein and said first protein.

Claim 14 (Currently Amended): A method for purifying native bovine alpha-crystallin protein, said method comprising the steps of:

- contacting a protein fraction comprising ~~an~~ the bovine alpha-crystallin protein with a glycine solution having a pH of approximately 2.5;
- size filtering the fraction of step a) by chromatography;
- neutralizing the fraction containing the bovine alpha-crystallin protein; and
- ~~buffering the alpha-crystallin protein to~~ dialyzing the fraction containing the bovine alpha-crystallin protein into a buffer comprising 50% glycerol and having a pH of approximately 8.

Claim 15 (Currently Amended): A method for protecting a protein from proteolysis during purification, said method comprising applying a sample comprising said protein to a chromatographic pre-column filter, said filter comprising bovine alpha-crystallin protein[[],] that is coupled to a chromatography resin.